

5-24-2006

# 12th Annual Governors State University Student Research Conference Proceedings

Shailendra Kumar Ph.D., Editor

*Governors State University*, [skumar@govst.edu](mailto:skumar@govst.edu)

Follow this and additional works at: [https://opus.govst.edu/student\\_research\\_conference](https://opus.govst.edu/student_research_conference)



Part of the [Scholarship of Teaching and Learning Commons](#)

---

## Recommended Citation

Kumar, Shailendra Ph.D., Editor, "12th Annual Governors State University Student Research Conference Proceedings" (2006).  
*Student Research Conference Proceedings*. 12.  
[https://opus.govst.edu/student\\_research\\_conference/12](https://opus.govst.edu/student_research_conference/12)

This Book is brought to you for free and open access by the University Events, Conferences, and Workshops at OPUS Open Portal to University Scholarship. It has been accepted for inclusion in Student Research Conference Proceedings by an authorized administrator of OPUS Open Portal to University Scholarship. For more information, please contact [opus@govst.edu](mailto:opus@govst.edu).



The background of the cover is a photograph of a library interior. Several students are visible, some sitting at long wooden tables and others standing. A red rectangular stamp is located in the upper right corner of the image.

GSU ARCHIVES  
GSUA 600-2

*Proceedings of the*

**12th Annual**  
**GSU Student**  
**Research**  
**Conference**

**Wednesday,**  
**May 24, 2006**  
**9 a.m. - 5 p.m.**

Editor:  
Dr. Shelly Kumar  
Division of Science  
College of Arts and Sciences

Governors State University



**Proceedings of the  
12th Annual GSU Student Research  
Conference**

---

GSU ARCHIVES

GSUA 600-2

**Governors State University  
University Park, IL 60466**

**May 24, 2006**

**Editor:**

**Dr. Shelly Kumar  
Division of Science  
College of Arts and Sciences**



# **PARTICIPANTS**

## **Students of Governors State University**

**College of Arts and Sciences**

**College of Business and Public Administration**

**College of Education**

**College of Health Profession**

**Board of Governors**

# TABLE OF CONTENTS

---

	Page
President's Message .....	4
Conference Steering Committee Message .....	5
Keynote Speaker Biography .....	6
Abstract: Keynote Address .....	7
Program Summary .....	8
Conference Program .....	9
Abstracts of Papers .....	12
Student Participants .....	29
Faculty Sponsors .....	30
Conference Steering Committee .....	31
Acknowledgments .....	32
Notes .....	33



May 2006



Dear Student Researcher:

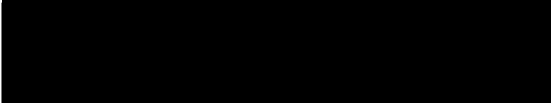
Welcome to the Annual Governors State University Research Conference. Thank you for sharing the results of your research with the GSU academic community.

Scholarship encompasses many types of research: the basic research of discovery, applied research, pedagogical research, and integrative research. The projects reported on in the Conference include all of these. The common thread is the creation of new knowledge.

Congratulations to you and to the faculty who have taught you. We are proud to have you as members of the GSU community.

Thank you for taking part in research in the adventure of creating new knowledge.

Sincerely,



Stuart I. Fagan  
President

## **A MESSAGE FROM THE CONFERENCE STEERING COMMITTEE**

The steering committee is pleased to announce the 12th Annual GSU Student Research Conference to be held on May 24, 2006. For the past eleven years this conference has become a tradition in excellence, and we are confident that today again we will witness another session of quality presentations by our students. This conference will be presented in its original format and with its original objectives:

1. To provide students an opportunity to present their research work before an audience of their peers, and to use the comments they receive to improve presentations made at professional conferences.
2. To provide a forum to highlight research accomplishments at GSU, and honor students presenting their research work.
3. To generate enthusiasm among the student body in general, and encourage them to pursue research and other scholarly activities.
4. To enhance communications in the area of research among the four colleges at GSU. The interactions may also lead to collaborative work among students and faculty of different colleges.
5. To enhance the image of GSU in the area of teaching, as research is considered an integral part of teaching at the university level. In the long run a larger number of students attracted to research would enroll at GSU to pursue higher education.

The committee hopes that you will enjoy the conference, that you share in the excitement of doing research, and that you will look forward to participating in future student and professional conferences.

## KEYNOTE SPEAKER BIOGRAPHY

The Student Research Conference Steering Committee is proud to announce that the keynote speaker for the lunch will be:

**Dr. Mrinalini C. Rao, Ph.D.**

Vice Provost and Professor, Department of Physiology & Biophysics  
University of Illinois, Chicago, IL

Dr. Mrinalini C. Rao is a Vice-Provost and a Professor of Physiology & Biophysics at the University of Illinois, Chicago, IL. She earned her bachelors (1969) and Masters (1971) degrees in Botany from the University of Delhi, India and her masters (1974) and Ph.D. (1977) degrees in cellular and molecular biology from the University of Michigan, Ann Arbor, MI. During her studies at the University of Delhi, she was a National Science Merit Scholar through Government of India, and she was a Gold Medalist for her bachelors degree. She was the Ford Foundation Pre-doctoral Fellow for her Ph.D. program. After her Ph.D., she was an NIH Post-doctoral fellow (1977-80) and Assistant Research Professor (1980 -83) at the University of Chicago. She joined University of Illinois as an Assistant Professor in 1984, and became an Associate Professor in 1989, and a full professor in 1996. Prior to becoming the Vice Provost in 2002, she served as an Associate Dean and Executive Associate Dean at the University of Illinois. Besides being an administrator, Dr. Rao is a prolific researcher with 79 peer-reviewed publications. Through her teaching and research tenure at UIC, she has received several honors including Lucille Markey Charitable Trust Fellowship (1985), University Scholar (1992-95), Philip L. Hawley Distinguished Faculty Awards (1994, 1997, 2005), Teaching Recognition Program Award (2000), Excellence in Teaching Award (2000), Fellow of the Honors College (2004), and Woman of the Year award (2004). Dr. Rao's research focuses on elucidating the molecular mechanisms underlying hormonal and neurotransmitter mediated regulation of physiological processes. She is particularly interested in solving mechanisms which modulate ion transport across epithelial cells.



# **THE THRILL OF RESEARCH**

## **TO SECRETE OR NOT TO SECRETE: LESSONS FROM THE DEVELOPING COLON**

Mrinalini C. Rao

Vice Provost and Professor, Department of Physiology & Biophysics  
University of Illinois, Chicago, IL

### **ABSTRACT**

The talk will begin with some general thoughts on the excitement of research in an academic setting in the 21<sup>st</sup> century. The focus of the talk will be on recent research in the laboratory.

Overall, research in the Rao laboratory focuses on elucidating the molecular mechanisms underlying hormonal and neurotransmitter-mediated regulation of physiological processes, in particular, those modulating ion transport across epithelial cells. The major emphasis is on the gastrointestinal tract, where such studies help elucidate the basis of diseases ranging from infectious diarrheas to inflammatory bowel disease and cystic fibrosis (CF). In general, epithelial ion transport processes are complex and are involved in the vectorial movement of salt and water as well as in routine cellular functions such as the regulation of growth, volume and pH. This laboratory has been successful in establishing primary cultures of human and rabbit colonic epithelia, considered a difficult task, since intestinal epithelial cells do not lend themselves readily to isolation and culture. This has facilitated the study of various ion transporters including chloride channels, such as the cystic fibrosis transmembrane conductance regulator (CFTR), the sodium-potassium-chloride cotransporter (NKCC) and the sodium/hydrogen exchangers (NHE). Examination of the regulation of these transporters by cAMP, cGMP and calcium signal transduction cascades is a primary focus. For example, this laboratory has demonstrated the presence of second messenger-specific protein kinases and CFTR in the human colon and that the colon of CF subjects exhibits impaired Cl<sup>-</sup> transport in response to cAMP-, cGMP- and calcium stimulation. This laboratory has also demonstrated the expression of genes involved in ion transport in mammary epithelial cells. In addition, mammatropic hormones, such as prolactin, have been shown to modulate sodium and chloride transport in these cells.

Recent efforts in the laboratory are concentrated on the exciting new areas of compartmentalization, including the study of scaffolding proteins and of cross-talk between various signaling pathways. For example, changes in cGMP and calcium signaling have been observed during development in the colon. The precise site/step of this differential regulation has been identified to the lack of appropriate expression of specific gene products in the signaling cascade. Two exciting candidates are phospholipase C and protein kinase C delta and this data will be presented. An elucidation of the individual molecular events will help in the understanding of the molecular basis of varied physiological processes such as milk production and intestinal secretions.

# PROGRAM SUMMARY

---

## **Engbretson Hall:**

8:30 A.M. – 9:00 A.M.	Conference Registration & Continental Breakfast
9:00 A.M. – 9:20 A.M.	Welcome and Introduction
9:20 A.M. – 10:40 A.M.	Podium Presentations
10:40 A.M. – 11:00 A.M.	Refreshment Break
11:00 A.M. – 12:00 Noon	Podium Presentations

## **Hall of Honors:**

12:00 P.M. – 12:45 P.M.	Lunch
12:45 P.M. – 1:30 P.M.	Keynote Address
1:30 P.M. – 2:00 P.M.	Poster Presentations

## **Engbretson Hall:**

2:00 P.M. – 2:20 P.M.	Certificates Presentation to Student Participants
2:20 P.M. – 3:40 P.M.	Podium Presentations
3:40 P.M. – 4:00 P.M.	Refreshment Break
4:00 P.M. – 5:00 P.M.	Podium Presentations
5:00 P.M. – 5:05 P.M.	Concluding Remarks

# CONFERENCE PROGRAM

---

## Conference Registration & Continental Breakfast

8:30 A.M. Hall of Governors

**Program Commencement** Engbretson Hall

9:00 A.M. ***Welcome and Introduction:***  
Dr. Shelly Kumar  
Division of Science  
College of Arts and Sciences

***Greetings:***  
Dr Paul Keys, Provost

**Podium Presentations** Engbretson Hall

**Session I Moderator:**  
Professor Cynthia Carr  
Division of Nursing and Health Sciences  
College of Health Professions

9:20 A.M. "HISPANICS AND THE EDUCATION GAP", Kathy Sue King and Adriela Fernandez \*, English Education, Division of Liberal Arts, CAS. p 13.

9:40 A.M. "APPALACHIA, THEIR STORY", Patty S Page and Todd Rohman\*, American History, Division of Liberal Arts, CAS. p 14.

10:00 A.M. "THE EFFECTS OF COMPUTER-BASED CURRICULUM ON STUDENTS' MASTERY OF MUSIC THEORY SKILLS", Jason Hawkins and Ken Jandes\*, Educational Administration, Division of Education, COE. p 15.

10:20 A.M. "METHOD VALIDATION BY GC-MS", Syam Bandi, and Joseph Addison\*, Analytical Chemistry, Division of Science, CAS. p 16.

10:40 A.M. ***Refreshment Break***

**Session II Moderator:**

Dr. Frances Kostarelos  
Division of Liberal Arts  
College of Arts and Sciences

- 11:00 A.M. "THE VISUAL EXPLORATION OF POWER THROUGH THE USE OF HAND IMAGERY AND ASSOCIATED TEXT", Mary Rossi and Javier Chavira\*, Painting, Division of Liberal Arts, CAS. p 17.
- 11:20 A.M. "CRIME REPORTING IN THE MEDIA", Bonnie Novakovic and Ana Kong\*, Media Communications, Communications & Training, Division of Liberal Arts, CAS. p 18.
- 11:40 A.M. "FUNCTIONAL, FABULOUS, AND FABRIC: THE WONDERFUL WORLD OF QUILTS", Margaret L. Hosty, Dr. Arthur Bourgeois \*, Art History, Division of Liberal Arts, CAS. p 19.

**Conference Lunch**

Hall of Honors

12:00 Noon

**Lunch**

12:45 P.M.

**Keynote Speaker**

Mrinalini C. Rao  
Vice Provost and Professor, Department of Physiology & Biophysics  
University of Illinois, Chicago, IL

Speaking on:

THE THRILL OF RESEARCH  
TO SECRETE OR NOT TO SECRETE: LESSONS FROM THE DEVELOPING COLON

**Poster Presentations**

Hall of Honors

- 1:30 P.M. "THE PENNY PROJECT: TRACE LEAD DETERMINATION IN THE U.S. CENT (1864 TO 1962)", Natalie Coleman, Karen D'Arcy\*, and Gary Lyon\*, Analytical Chemistry, Division of Science, CAS. p 27.
- "TESTING FENUGREEK EXTRACT AS ANTIOXIDANT THROUGH PROTEIN CROSS-LINKING ", Mohammed Atieh and Shailendra Kumar\*, Analytical Chemistry, Division of Science, CAS. p 28.

2:00 P.M.           **Certificates Presentation**  
Dr. Paul Keys, Provost

**Session III Moderator:**  
Ms. Sheryl Szot Gallaher  
Director, Office of Economic Education  
College of Business and Public Administration

2:20 P.M.           “**AFTER SCHOOL PROGRAMS - A BETTER ALTERNATIVE**”, Merri Walton and Todd Rohman\*, Liberal Arts, BOG. p 20.

2:40 P.M.           “**WRITING WITHOUT NONSENSE: AN APPROACH TO RESEARCH WRITING**”, Mahfouz A. Adedimeji, English, Fulbright Scholar, Division of Liberal Arts, CAS. p 21.

3:00 P.M.           “**MEDICAL MIRACLES**”, Karen Mayo and Dan Nearing\*, Liberal Arts, BOG. p 22.

3:20 P.M.           “**EXPLORING THE SEXUALIZATION OF RACISM USING KENNETH BURKE’S REPRESENTATIVE**”, Urania Smith and Todd Rohman\*, English, Division of Liberal Arts, CAS. p 23.

3:40 P.M.           ***Refreshment Break***

**Session IV Moderator:**  
Dr. Shelly Kumar  
Division of Science  
College of Arts and Science

4:00 P.M.           “**CREATING A SELF-HELP PAMPHLET FOR HIGH SCHOOL STUDENTS**”, La Wanna Wells and George Garrett\*, Educational Administration, EDAD. p 24.

4:20 P.M.           “**KNOWLEDGE FOR DEVELOPMENT**”, Matthew Dominiak and Adriela Fernandez\*, Criminal Justice Studies, CAS. p 25.

4:40 P.M.           “**THE BAD SAMARITAN LAW**”, David B. Medwed and Todd Rohman\*, Liberal Arts, BOG. p 26.

5:00 P.M.           ***Concluding Remarks***  
Dr. Shelly Kumar



## ABSTRACTS OF PAPERS

---

Abstracts are produced by permission of the authors, and are not to be construed as publications. Permission to reproduce, quote, or cite any data contained herein may be granted only by application to the individual authors. Distribution is limited to the registrants at the 12th Annual GSU Student Research Conference and to the GSU faculty and administration for personal use only.

The authors with underlined names are the presenting authors. The authors with asterisks are the faculty sponsors.

Governors State University  
University Park, Illinois

## **HISPANICS AND THE EDUCATION GAP**

Kathy Sue King and Adriela Fernandez\*

English Education  
Division of Liberal Arts, CAS

### **ABSTRACT**

Hispanics are fast becoming the largest minority group in the United States yet there is a gap between the scores and graduation rates between Whites and Hispanics. To critically examine the Hispanics and education gap, this work takes information from both biographical and professional publications and includes an interview with former Chicago school board president Gery Chico. The paper discusses possible reasons for the achievement gap in scores, graduation rates, and college attendance, ranging from early childhood experiences, poverty and class differences to a lack of role models, mentors, and support systems for Hispanic students. The article concludes that the gap must be addressed by communities and parents coming together to raise expectations, create an environment of learning, and to offer successful Hispanic role models who can mentor students and encourage them not only complete high school, but to go to college and beyond.

## APPALACHIA, THEIR STORY

Patty S Page and Todd Rohman\*

American History  
Division of Liberal Arts, CAS

### ABSTRACT

Appalachia has been glamorized in movies like *Oh Brother Where Art Thou* and *Songcatcher* but aside from the theater screen, any word from these fellow Americans remains unspoken like those of a shy child forced into the background by more boisterous brothers and sisters. When we sit down in the evening to watch the national news on our favorite stations, we hear about court cases, murders, what's happening in Washington, floods in Maine, fires in California, hurricane recovery in Louisiana, immigration in New Mexico, drilling off the coast of Florida, but not a peep about the people or the economics of Eastern Tennessee and Kentucky or West Virginia. Many people don't even know where Appalachia is.

This presentation is intended to call to attention to the people, their heritage and their economic condition. The photographs in this presentation are authentic to Appalachia and were taken over the last two hundred fifteen years. Literature includes several books including:

*Across This Land, A Regional Geography of the United States and Canada*, John C. Hudson, The John Hopkins University Press, 2002.

*The Story of English*, McCrum, MacNeil and Cran, Penguin Books, 2003.

*Albion's Seed, Four British Folkways in America*, David H. Fischer, Oxford University Press, 1989.

*A Guide to Historic Coal Towns of the Big Sandy River Valley*, George D. Torok, The University of Tennessee Press, 2004.

*Appalachian Center*, [www.uky.edu](http://www.uky.edu) (an internet project of the University of Kentucky).

# THE EFFECTS OF COMPUTER-BASED CURRICULUM ON STUDENTS' MASTERY OF MUSIC THEORY SKILLS

Jason Hawkins and Ken Jandes\*

Educational Administration  
Division of Education, COE

## ABSTRACT

As technological developments remain at the forefront of the field of education, music educators are striving to keep their subject area up-to-date. Following the differentiated instruction model, teachers are now looking to embrace different learning styles and find dynamic ways to adapt their instruction to reach all students. The purpose of this proposal is to explore the effectiveness of computer-based music technology on forty high school music students in a far west-suburban Chicago area high school in order to accommodate varied learning styles. This study will compare the theory test scores of 20 high school Mixed Choir students who receive instruction using the computer-based program *Alfred's Essentials of Music Theory* (the treatment) and 20 students who do not. The program, developed by Alfred Publishing, a leading publisher of music education materials and software, is a comprehensive music theory program. It uses example-based teaching combined with a narration to help students develop the basic skills of music theory. Following a pretest to ensure equity of the two sample groups, one randomly assigned group will be administered the treatment for 30 days. The second group will act as the control group. Following the treatment period, both groups will be administered a posttest measuring music aptitude. Analysis of the posttest scores will be performed using a two-tailed t-test for independent samples. The results of the study may show a significant difference in test scores among students who received training using the computer-based technology compared to students who did not. If the scores of the treatment group are significantly higher than the scores of the control group, the results of this quasi-experiment may indicate an important benefit of computer-based technology in music education for these forty students. A larger, more controlled study would then be recommended.

## METHOD VALIDATION BY GC-MS

Syam Bandi and Joseph Addison\*

Analytical Chemistry  
Division of Science, CAS

### ABSTRACT

The main objective of this research is to determine simultaneously, the amount of each component in a mixture of drugs. The drugs used are Pseudoephedrine and Desloratidine. Pseudoephedrine is a decongestant used to treat allergies, hay fever, sinus irritation and common cold. Desloratidine is anti-histamine used to prevent sneezing, runny nose, itching and watering of eyes, and other allergies symptoms.

The instrument used in this project was Saturn Gas Chromatograph/Mass Spectrometer (GC/MS), in the chemical ionization mode. The GC is a separation device and the mass spectrometer is an identification device.

The GC/MS validation method was successful in effecting separation of the drug mixtures in the chemical ionization mode, but unsuccessful in the electron impact ionization mode.

The validation method demonstrated an analytical approach to multiple drug validation that has the potential of being cost effective and less time consuming than other drug validation methods based on liquid chromatography/mass spectrometry (LC/MS).



# THE VISUAL EXPLORATION OF POWER THROUGH THE USE OF HAND IMAGERY AND ASSOCIATED TEXT

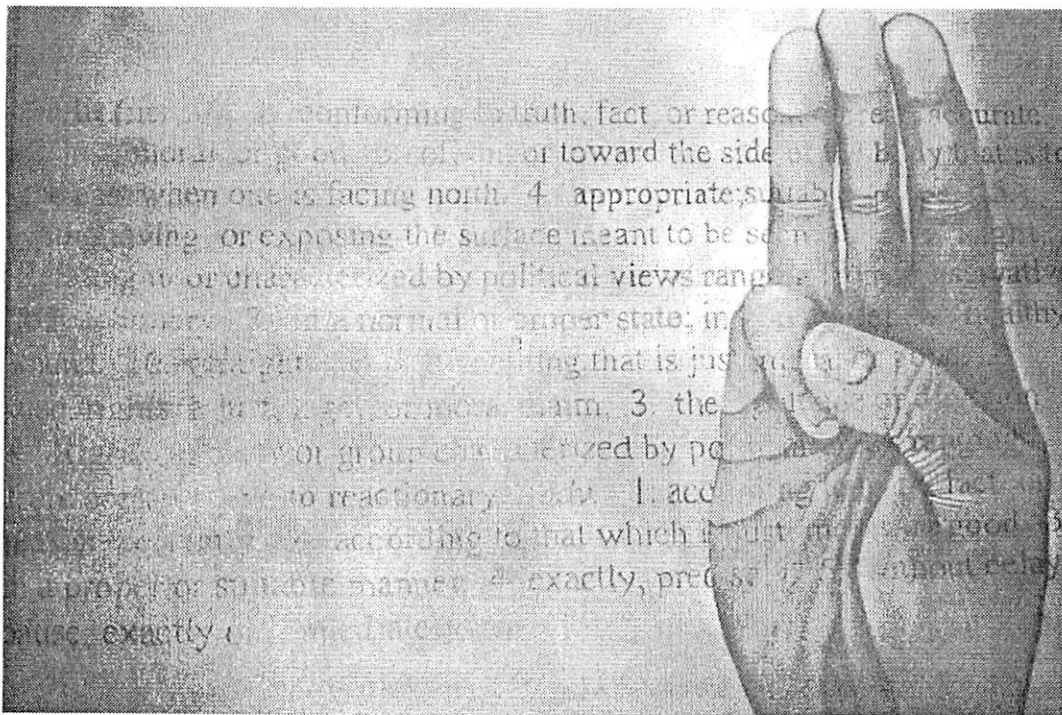
Mary Rossi and Javier Chavira\*

Painting  
Division of Liberal Arts, CAS

## ABSTRACT

The intention of my work is to visually explore the generation, manifestation and perpetuation of power through the use of Hand imagery and associated text.

My work as a GSU Masters student is important to my growth as an artist, as a professional Art educator and ultimately as a human being because of its personal relevance and consequently personal growth. Most importantly, this works' importance is in the universal relevance of the human condition as it considers the idea of Power.



## **CRIME REPORTING IN THE MEDIA**

Bonnie Novakovic and Ana Kong\*

Media Communications, Communications & Training,  
Division of Liberal Arts, CAS

### **ABSTRACT**

Journalism's job is to present the news objectively, to seek truth in reporting, and to provide comprehensive coverage of issues and events. But the media outlets – including newspapers, radio, and television – are in business to make money.

The American public has made it clear that entertainment is more important than information. Murder and mayhem draw bigger ratings on the local news than stories about the economy. Because of our exposure, via the media, to crime and violence, we have become desensitized. Paradoxically, we also believe that we are surrounded by crime.

Is there an alternative approach to reporting crime? The Public Health Model of reporting diseases and conditions of importance to public health is a systematic method of collecting and sharing data. Risk factors are identified and prevention strategies are considered, compared, and instituted. Then surveillance (data gathering) begins again and the results are again compared to current and prior data. If there has been an improvement the prevention strategies may simply continue or new strategies may be initiated.

Similarly, in a Public Health Model of reporting crime and violence, data can be collected from reliable sources following standardized definitions including demographics of both victim and perpetrator. Risk factors and prevention strategies can then be determined. Violence would not be glamorized; it would be objectively reported and interpreted.

It is up to the American public to decide how they should be informed. If we make the right decisions, we can make a difference in our world.

# **FUNCTIONAL, FABULOUS, AND FABRIC: THE WONDERFUL WORLD OF QUILTS**

Margaret L. Hosty and Arthur Bourgeois\*

Art History  
Division of Arts, CAS

## **ABSTRACT**

Quilts are a marvelous means for people to connect, whether by their cooperative creation, or via heirlooms passed down through generations to commemorate and solidify familial bonds. As a child, my mother used to teach introductory quilting classes as an adult education offering at Richard J. Daley College in Chicago, Illinois. Occasionally, I would accompany her to class, to help pass out materials, and to demonstrate basic techniques. I made my own full-fledged quilt at the age of ten; almost thirty years later, it remains one of my young nephew's favorite blankets.

This presentation is intended to call to attention the beauty and flexibility and uniqueness of the textile domain and its fabric artisans, as the quilt is all-too-often overlooked or dismissed in its capacity as a bona fide art form; color, form, texture, contrast, and composition are equitably present in quilting masterpieces, no less so than in works rendered on canvas or paper. As such, quilters are as deserving of the respect customarily afforded to artists of the more traditional media, and their work is to be esteemed in a comparable light.

The quilts which are featured in this particular presentation have been culled primarily from prize-winning entries of quilting contests held across the nation, and many entries are the work of amateurs, who do not produce "art quilts" for gallery sale purposes. The American Quilter's Society holds one of the largest conventions in the world annually in Padukah, Kentucky, at which many of these quilts had been featured.

# **AFTER SCHOOL PROGRAMS - A BETTER ALTERNATIVE**

Merri Walton and Todd Rohman\*

Liberal Arts  
BOG

## **ABSTRACT**

Education is the KEY to the future of our children who are the future of American. This will be an in dept account of "Cause and Effect" of social issues currently plaguing the American school system as well as an alternative solution to the problems. Cause: lack of school equality, lack of student motivation, lack of student aspiration, and lack of academic innovation. Effect: lack of interest (children, parents & teachers), high drop-out rate, high unemployment rate, high crime rate, and prison over-crowdedness. To reveal a proven solution I will attempt to illustrate a bird's-eye-view of the theory and interdisciplinary role of a better alternative for some of the detrimental problems that are causing havoc in our school system: After School Programs – A Better Alternative.

# WRITING WITHOUT NONSENSE: AN APPROACH TO RESEARCH WRITING

Mahfouz A. Adedimeji

English  
Fulbright Scholar, Division of Liberal Arts, CAS

## ABSTRACT

Writing is a conscious process that involves the physical, physiological and psychical domains of a writer. It involves pre-writing, writing and re-writing skills through which the thought process of the writer becomes accessible and usable to the reader. That people's relationship to the process of writing is that of helplessness has been established (Elbow, 1973: 12) but writing is a skill, it can be developed and enhanced, like other skills of language: listening, speaking and reading. This paper conceptualizes writing and examines how research writing, the task of students, teachers and other professionals, can be successfully attained while avoiding its common encumbrances. The stages, processes and elements of research writing are highlighted with a view to making the business of writing, especially research writing, a delightful and self-fulfilling experience rather than an inescapable ritual that characterizes academic life. While the paper ultimately establishes that effective writing purely derives from "nonstop writing" (Hacker, 2003:7), it submits that there is a symbiotic relationship between reading and writing and that being well read, and making keen observations and rigorous research eventually produce quality writing.



## **MEDICAL MIRACLES**

Karen Mayo and Dan Nearing\*

Liberal Arts  
BOG

### **ABSTRACT**

Medical Miracles is an inspiring documentary of great courage, strength and astonishing medical triumph. The documentary explores the impact that consumer advocacy and healthcare literacy play in medical successes. Today more than ever, individual healthcare management is a prerequisite to assuring quality healthcare. Through the maze of medicare policies to the perils of PPO's and HMO's, your working knowledge of the policies and procedures of your healthcare plan and your general understanding of the healthcare industry overall plays a significant role in your health and wellness as well as the health and wellness of your loved ones.

You wouldn't wait until you retire to start planning for your 401K, don't wait until you are sick to see this documentary.

# EXPLORING THE SEXUALIZATION OF RACISM USING KENNETH BURKE'S REPRESENTATIVE

Urania Smith and Todd Rohman\*

English  
Division of Liberal Arts, CAS

## ABSTRACT

This presentation is a discussion of the relationship between sex and racism as shown in early American cinema. By using Kenneth Burke's "representative anecdote" as a way of media criticism, I will discuss how media serves as a representative or reflection of societal fears that are prevalent during a particular time.

The films that I will critique using the Burkean method are Shirley Temple's 1935 film *Madame Cradlebait* and D.W. Griffith's 1915 film *The Birth of A Nation*. These films portray a similar anecdote that depicts the following: White women find themselves victims of African American males, but are ultimately rescued by White male heroes. My discussion focuses on the central irony of early 20<sup>th</sup> century films' representation of black males as oppressors or victimizers despite a historical reality which is the inverse. This presentation aims to reveal how, through carefully constructed images, these films had exploited cultural fears of miscegenation, and will explore how historically society has symbolically dramatized these fears as one way to justify mistreatment of American Blacks, especially Black men.

# CREATING A SELF-HELP PAMPHLET FOR HIGH SCHOOL STUDENTS

La Wanna Wells and George Garrett\*

Educational Administration  
Division of Education, EDAD

## ABSTRACT

As a part of my Type-75 administrative practicum, I had to complete a major project. I chose to create a self-help pamphlet for high school students on how to become successful. I gathered research from educational books such as college preparatory books, and I created original research tools such as surveys. I surveyed and interviewed "successful people" from Homewood-Flossmoor Community High School and the surrounding community with the goal of compiling their useful information into a student friendly packet. The ultimate goal of this pamphlet was to give advice to America's future leaders by giving them a tool in which they could relate. I plan to present the process of how this pamphlet was created and give advice on how to conduct research in any field.

# KNOWLEDGE FOR DEVELOPMENT

Matthew Dominiak and Adriela Fernandez\*

Criminal Justice Studies  
Division of Liberal Arts, CAS

## ABSTRACT

Knowledge is the backbone to the field of International Political Economy (IPE). When used properly, it can help advance already wealthy nations, and can contribute to bring about a more satisfactory status of living in underdeveloped countries. Knowledge is a public good, that is, it should be shared among nations to bring about a level of equality. This essay will critically examine how knowledge plays an integral part in the life of the global community. We will look at different information failures, such as, HIV/AIDS, overpopulation, malnutrition, and war to show how the failure to share information can lead to the exploitation of others. The effectiveness of the green revolution will also be discussed in this context. After analyzing different aspects regarding knowledge and information, this essay will attempt to answer several questions: What is a knowledge intensive economy? What is an example of information failure in IPE? What must countries do to be competitive in this new economy? What is the role of education in a knowledge economy? The overall objective is that by the end of our analysis, we will have a better understanding of the importance of knowledge production and information sharing for development and nation building.

## **THE BAD SAMARITAN LAW**

David B. Medwed and Todd Rohman\*

Liberal Arts  
BOG

### **ABSTRACT**

My work to be presented at the 12<sup>th</sup> Annual GSU Student Research Conference involves a little known law called "The Bad Samaritan Law." This law proposes that people should be held responsible to some extent for their inaction should a crime occur in front of them. There are many issues involving this topic such as the seriousness of the crime and there are opposing views that will be explored during my presentation. My Power Point presentation is an interactive presentation, and it does involve the audience.



# **THE PENNY PROJECT: TRACE LEAD DETERMINATION IN THE U.S. CENT (1864 TO 1962)**

Natalie Coleman, Karen D'Arcy\*, and Gary Lyon\*

Analytical Chemistry  
Division of Science, CAS

## **ABSTRACT**

The Penny Project, a research experience for high school student analysts at Governors State University, determines minor components Zn and Sn as well as trace components in the U.S. Cent (1864 to 1962). A new spectroscopic method was developed for determination of trace lead concentrations in an acid digest of the U.S. Cent using flame and graphite furnace atomic absorption spectroscopy. Results will be reported for the 1909 Indian Head and Lincoln cents.

# TESTING FENUGREEK EXTRACT AS ANTIOXIDANT THROUGH PROTEIN CROSS-LINKING

Mohammed Atieh and Shailendra Kumar\*

Analytical Chemistry  
Division of Science, CAS

## ABSTRACT

Fenugreek, also called *methi*, has been used as a spice and as a herbal medicine in the eastern and middle eastern countries. Wide claims have been made for its use as anti-inflammatory agent, as expectorant, and as antioxidant, Fenugreek leaves have also been shown to affect hyperglycaemia in diabetic rats. Recently, fenugreek seeds have been implicated in reducing cataracts. In our laboratory, we have been studying mechanisms of cataractogenesis through peptide-resembling amino acid derivatives. One such derivative, N-Acetyltryptophan ethylamide, has been shown to react with itself under oxidation conditions, which are similar to the ones causing cataracts. Similar oxidation conditions have been shown to dimerize crystallins, proteins found in the eye lens, through cross-linking. This result of the chemical model study suggests a possible non-disulfide linkage in protein cross-linking. In the present project, we are studying the effects of fenugreek extract, obtained through soxhlet extraction, on reduction of N-acetyltryptophan oxidation and on dimerization of crystallins. Preliminary results will be shown in this presentation.

## STUDENT PARTICIPANTS

---

<u>Student</u>	<u>Major &amp; College</u>	<u>Page</u>
Mahfouz A. Adedimeji,	English, CAS	21
Mohammed Atieh	Analytical Chemistry, CAS	28
Syam Bandi	Analytical Chemistry, CAS	20
Natalie Coleman	Analytical Chemistry, CAS	27
Matthew Dominiak	Criminal Justice, CAS	25
Jason Hawkins	Educational Administration, COE	15
Margaret Hosty	Art History, CAS	19
Kathy Sue King	English Education, CAS	13
Karen Mayo	Liberal Arts, BOG	22
Dave Medwed	Liberal Arts, BOG	26
Bonnie Novakovic	Media Communications, CAS	18
Patty Page	American History, CAS	14
Mary Rossi	Painting, CAS	17
Urania Smith	English	23
Merri Walton	Liberal Arts, BOG	20
La Wanna Wells	Educational Administration, COE	24

## FACULTY SPONSORS

---

<u>Faculty</u>	<u>College</u>	<u>Page</u>
Joseph B. Addison	CAS	16
Arthur Bourgeois	CAS	19
Javier Chavira	CAS	17
Karen D'Arcy	CAS	27
Adriela Fernandez	CAS	13, 25
George Garrett	COE	24
Ken Jandes	COE	15
Ana Kong	CAS	18
Shailendra Kumar	CAS	28
Dan Nearing	CAS	22
Todd Rohman	CAS	14, 20, 23, 26

# **CONFERENCE STEERING COMMITTEE**

---

## **Conference Organizer**

Dr. Shelly Kumar

## **College Representatives**

Dr. Linda Buyer, College of Education

Prof. Cynthia Carr, College of Health Professions

Dr. Akkanad Isaac, College of Business and Public Administration

Dr. Frances Kostarelos, College of Arts and Sciences

## ACKNOWLEDGMENT

---

The Conference Steering Committee would like to thank the provost's office for financial assistance; division chairs, deans, provost, and president for the continual support and encouragement; PPO in setting rooms and audio-visual equipment; CELCS and Print Shop for help in graphics and printing; and Public Affairs for publicity.

# NOTES

---